

PHENIX WEEKLY PLANNING



2/16/2012

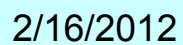
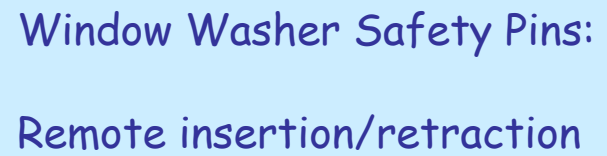
Don Lynch

This Week

- PHYSICS running
- maintenance Day - Yesterday 4 hr restricted access to IR and tunnels
 - FVTX to electrical troubleshooting
 - VTX/FVTX coolant leak troubleshooting
 - Other?
- MPC North rack assembly
- 2011 Shutdown review
- sPHENIX design and analyses

Next Week

- Run run run
- MPC North rack assembly
- maintenance Day - Wed 8 hr access (may be cancelled?)
 - Install MPC North rack?
- Planning and preparation for 2012 shutdown
- sPHENIX design and analyses





AH Crane variable speed drive
and wireless remote upgrade ??



Looking Ahead to the 2012 Shutdown (Continued)

TECHNICAL SUPPORT 2012

Rough Schedule:

Prep for shutdown	2/1-6/15/2011
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
Run 12 Ends	6/15/2012
Shutdown Standard Tasks	6/15-7/13/2012
• Open wall, disassemble wall, Remove MuID Collars,	
• Move EC to AH, etc.	
Disassemble VTX/FVTX services	7/2-7/20/2012
Remove VTX/FVTX and transport to Chemistry Lab	7/20/2012
Remove MMS & MMN vertical East lampshades	7/23-7/27/2012
MuTr South Station 1 work	
Install access (Sta. 1 work platforms)	7/23-7/27/2012
Disconnect Cables, hoses etc, ID/label all	7/30-8/3/2012
Remove FEE plates and chambers	8/6-8/10/2012
Station 2 Terminators and manifold upgrade through access opened by station 1 removal	8/13/-8/31/2012

Looking Ahead to the 2012 Shutdown (Continued)

MuTr South Station 1 work (Cont'd)

Clean/install new MuTr Sta. 1 chamber parts and upgrades

(concurrent At RPC Factory)

Re-install chambers and FEE plates

Re-cable, re-hose and test

Repair upgrade, test, reinstall VTX/FVTX

Station 3 North and South (upper half)

re-capacitation and air manifold upgrades

Summer Sunday (RHIC)

Substation breaker upgrade/test (CAD)

AH utility power distribution upgrade

RPC stations 1 and 3, north and south maintenance

Other detector maintenance as required

Infrastructure maintenance as required

TBD prototype tasks

pre-run commissioning and prep for run 13

Prep for EC roll in

Roll in EC

Prep IR for run

Pink/Blue/White sheets

Start run 13

8/13/-8/31/2012

9/4-9/7/2012

9/10-9/28/2012

7/23-9/17/2012

7/23-9/30/2012

8/5/12

TBD

TBD

As required

As required

As required

As required

10/1-11/30/2012

11/5-11/9/2012

11/12/2012

11/12-10/17/2010

10/17-11/30/201

12/3/2012

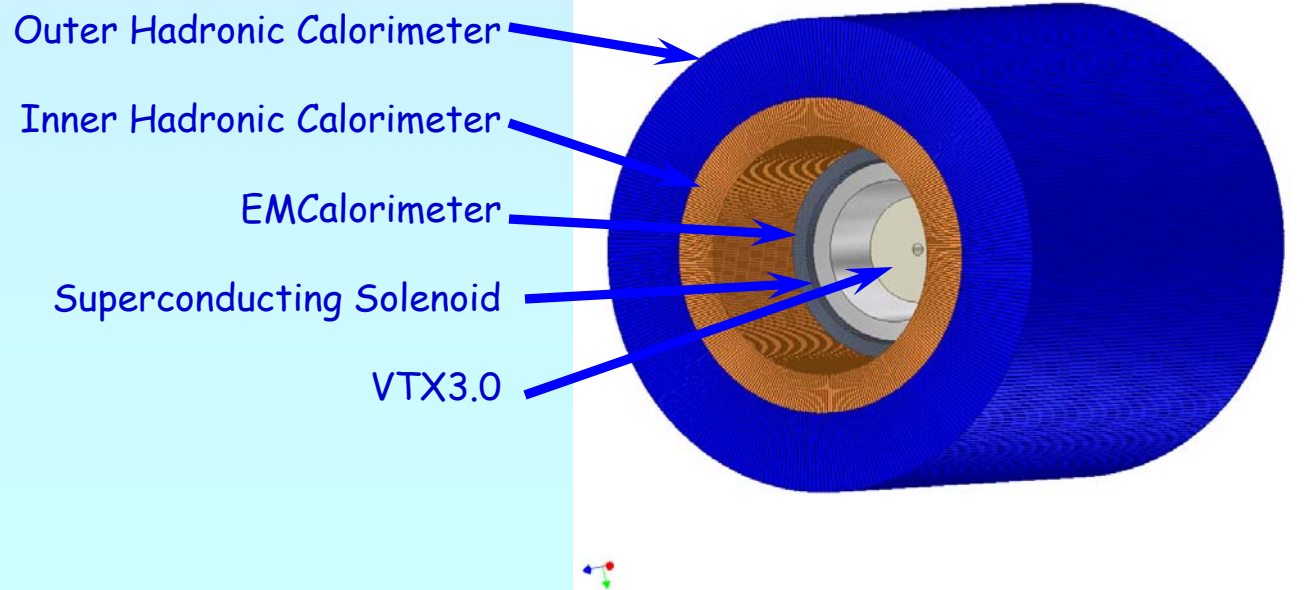


New Electrical Work for 2012 Shutdown, not yet scheduled

1. Support CAD replacement of Assembly Hall 480V Fused Switch Panels #8H-1, 8H-2, and 8 EMH1. Coordinate temporary power patch while work is being performed and minimize impact on shutdown work.
2. Add the Assembly Hall Crane lockout/contactors/ indicator light key switch circuit - similar to IR Crane.
3. Add Transient Surge Suppressor to 3 phase power panel on the Central Magnet Bridge.
4. The Gas Mixing House Breaker Panel for the Gas Mixing side is almost out of spare breaker slots and needs to be reviewed for increased capacity panel to replace it.
5. Work with Martin Purske on new computer rack replacements/additions for upcoming Run 13. He always has last minute Rack Room computer infrastructure changes involving power distribution circuit (UPS and normal AC power) re-work.

sPHENIX Upgrades

PHENIX engineering and design are providing support for overall structural and spacial design and modeling, cost estimation and prototype design/fabrication

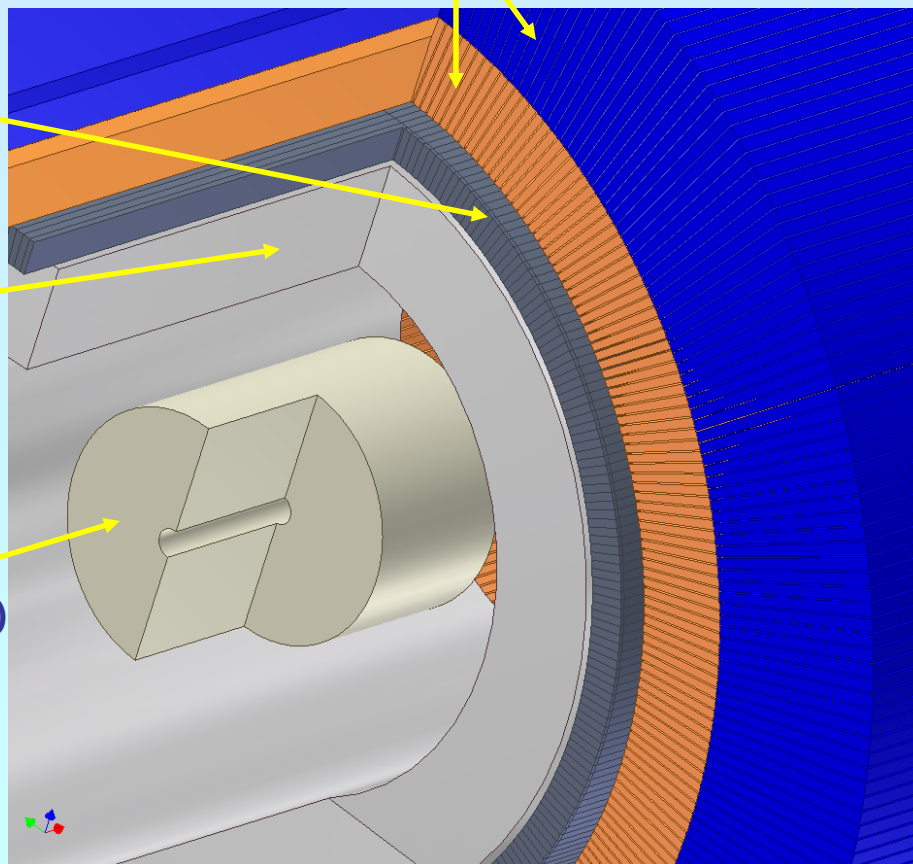


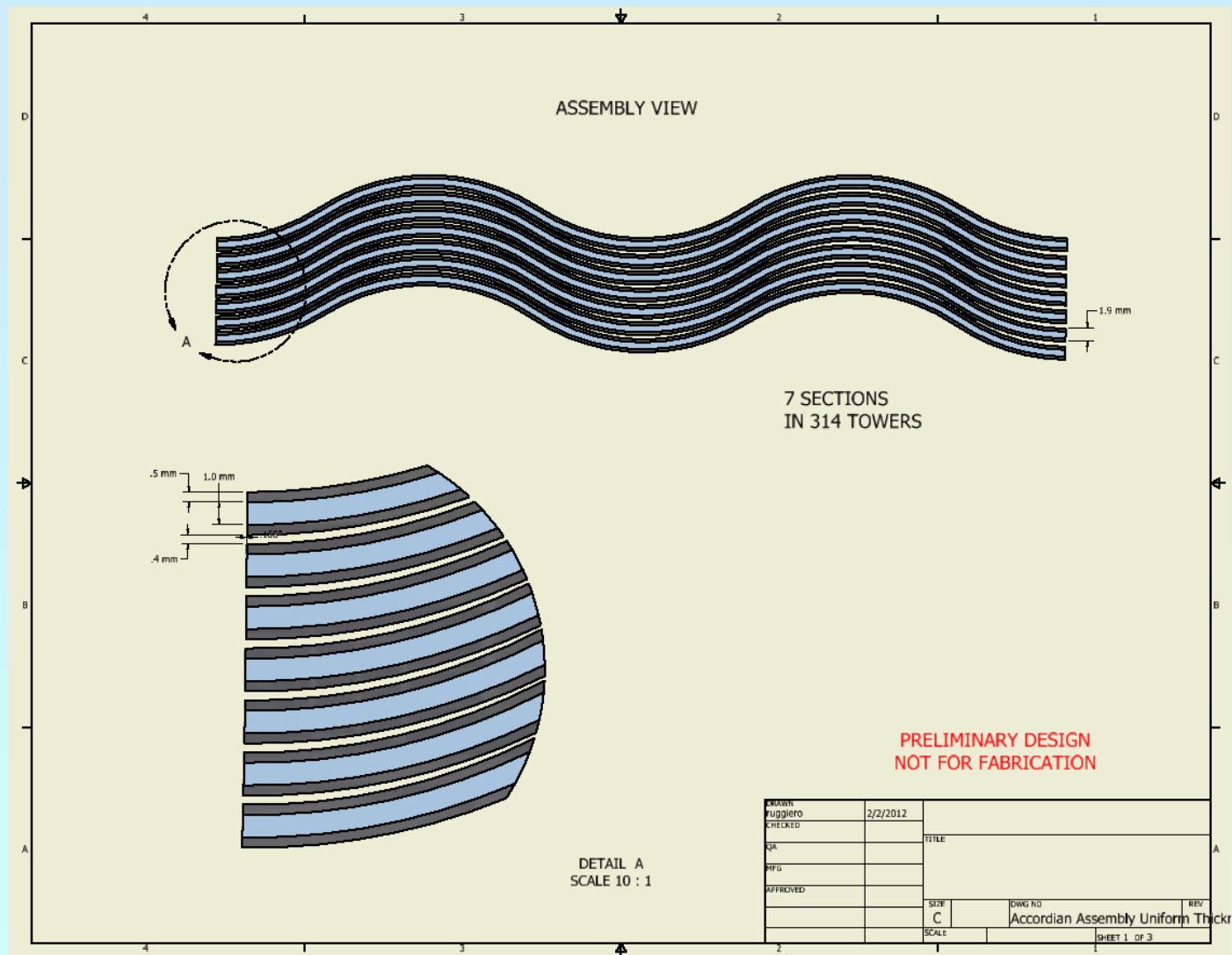
ElectroMagnetic Calorimeter
314 segments, Tungsten
and scintillator 0.125 m th
3.5 m long

Superconducting solenoid
2 Tesla Magnet and cryostat
.95 m inner radius, .39 m th

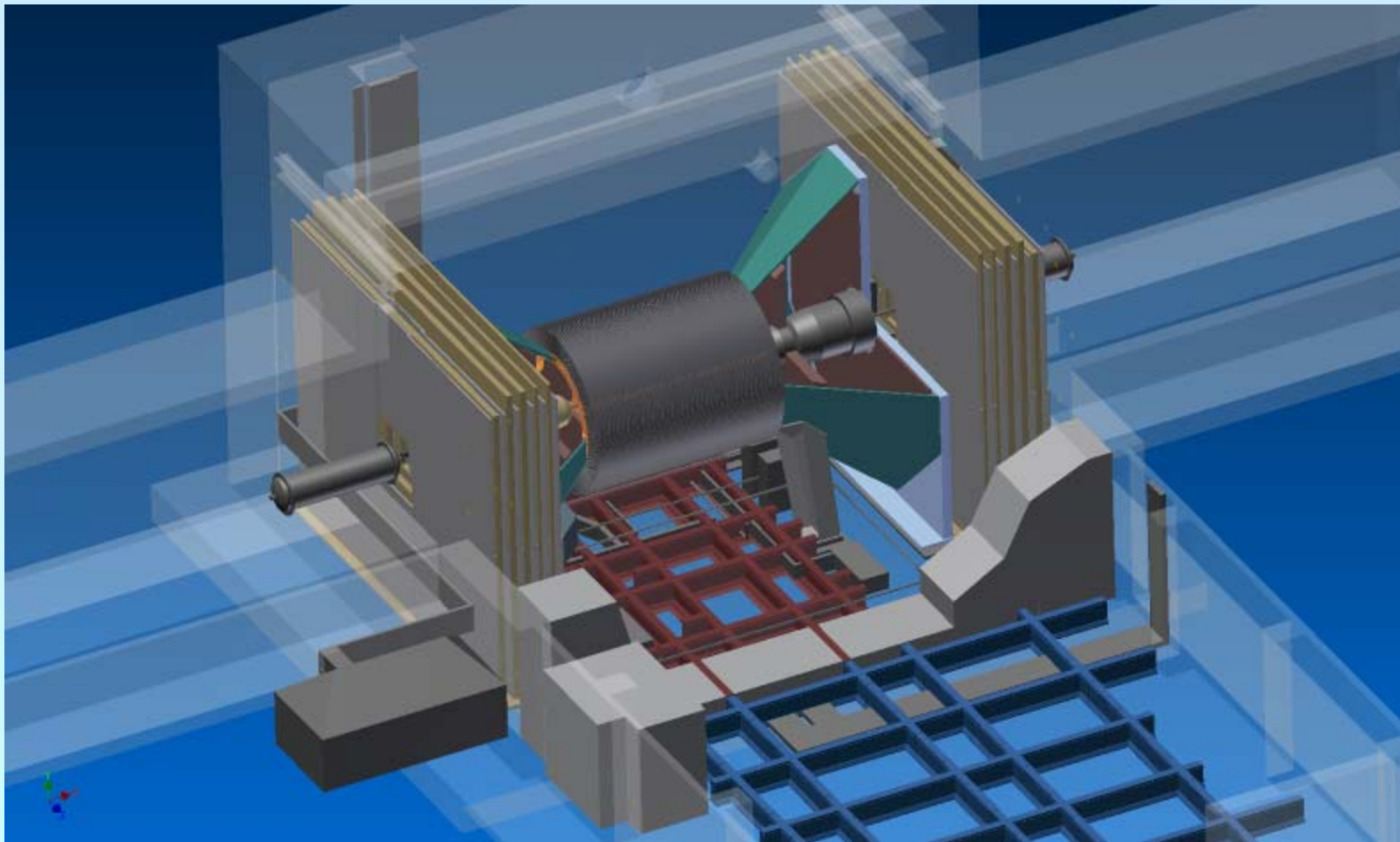
VTX 3.0 vertex detector
(upgraded from present VTX)

Inner and outer Hadronic Calorimeters
320 segments each, steel and scintillator
1 meter total thickness, 6+ meters long

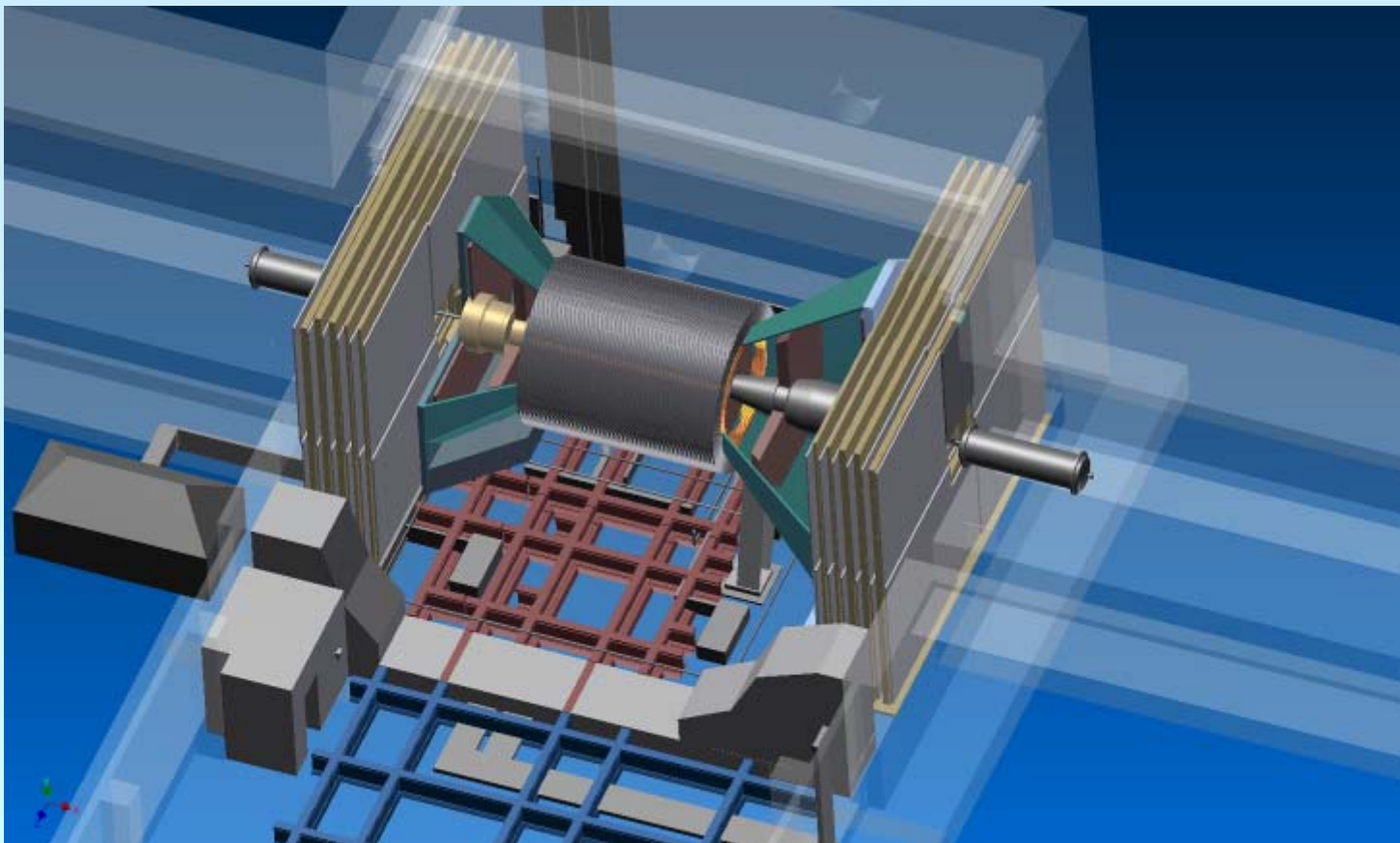




Electromagnetic calorimeter segments using "accordian" shaped scintillators and tungsten plates to optimize detector sampling



sPHENIX SC magnet, Hcal, EMCal and VTX3.0 in PHENIX IR with MMN, MMS, MuID in place, EC, WC and CM removed. No support structure or services considered yet



Infrastructure Issues

TECHNICAL
SUPPORT
2012

- Roof leaks in utility bathroom at northwest corner behind tech offices, over door between rack room and assembly hall, over door between control room and elect. ass'y room, southeast corner of IR and laser room.



- Flooding in AH/ Driveway heaving



- Electronics test/assembly room-to-parking lot door
(does not open/close/lock properly - needs to be replaced)
- Septic odor on the east side of trailers



1. PHENIX Engineers and Technician review of 2011 shutdown projects Notes:

MuTr station 1:

- a. need a platform to cover the hydraulic rams during FEE plate removal.
- b. Make sure kinematic v-blocks are secured when removing FEE plates
- c. Order water and air tubing to replace damaged or worn components
- d. Take care to optimize cabling and services to station 1 FEE boxes

MuTr station 2 south: access/work platform to be field designed/assembled after station 1 is removed. Have unistrut and hardware available prior to work.

MuTr station 3:

- a. Rich to design rigid platform at ~ beam height for both north and south magnets. Also design and procure standard scaffolding to be mounted on platform to reach upper station 3 octants.
- b. Will need to remove MMN access to North walkover and east vertical lampshade from MMS. Temporary access to walkover should also be designed.

RPC1:

- a. South Beampipe protection needs to be modified so FEE plates can be removed. Use north protection scheme as model.



1. PHENIX Engineers and Technician review of 2011 shutdown projects Notes (cont'd):

RPC (cont'd)1:

- b. Need a better access ladder/stair.
- c. Replace MPC bulky flat cable with same cable as MPC north. (check with Mickey)
- d. Order an additional 10' scaffolding section

VTX/FVTX:

- a. Both east and west need to come out
- b. Design better handles on transport fixture to protect cooling tubes
- c. Order a new set of rails, plates and carriages for use in Chemistry so don't need to remove and restore IR rails, plates and carriages
- d. Don't use riggers for transport (not worth it)
- e. Both VTX and FVTX can use better quality cables/connectors

RPC3/Hodoscope/Shielding:

- a. Add motion sensor switch for lights on east side
- b. Put a sign on HV boxes "Not A Step".
- c. North square shield still "clunks", doesn't roll easy . Needs a spacer. (Dave)

1. PHENIX Engineers and Technician review of 2011 shutdown projects Notes (cont'd):

Electronics:

- a. Communicate to subsystem managers that they must state their requirements early and unambiguously to avoid poor utilization of resources due to last minute inclusion of unexpected equipment.
- b. Communicate importance of training and supervision to the subsystem managers with regards proper handling of delicate equipment to prevent damage to expensive equipment, cables and fibers due to mishandling.
- c. Need to identify obsolete services passing through sill and remove them.
- d. Revisit cover for services coming from IR through sill.
- e. Plan for stripping out TEC electronics and services to free up TEC racks.

Other:

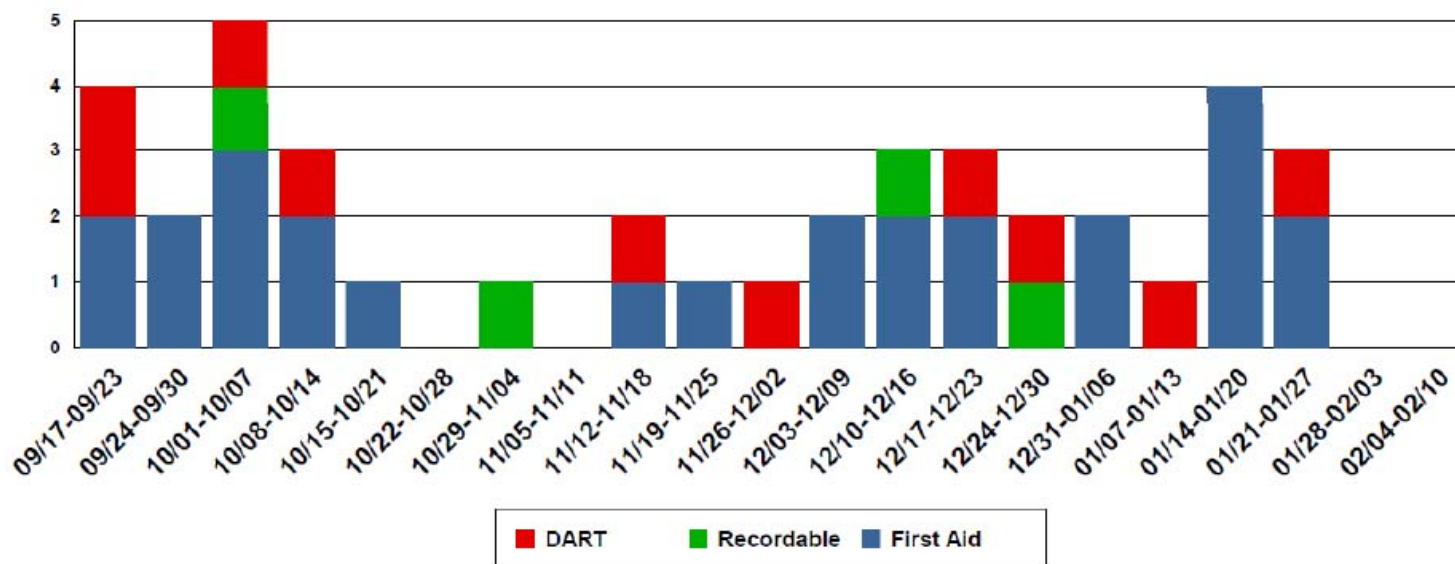
- a. Plan to close the rolling shield wall at least 1 week before the start of run to allow adequate time for PINK/BLUE/White sheets.
- b. Revive DC rail extensions for possible use next shutdown
- c. Add light & 2 switch controlled outlets below chiller platform in AH
- d. Add limit switch and improved spooling control for window washer cable.
- e. Add dusk to dawn light by gas mixing house and R134A shed
- f. GMH Handrails, deck and ramp need repair/replacement/resurfacing;
- g. Wood steps to driveway need to be replaced (unsafe).

2. From Mike Zarcone:

At your next staff meeting please reminder all the members of your staff to:

- Ensure that their vehicle registration is current on any vehicle they plan to bring to work
- Ensure that their vehicle sticker is displayed on all vehicles and is current

Injuries Per Week As of 2/10/2012



Injury Status:

FY12 YTD: DART – 8, TRC – 12, First Aid – 22

FY11: DART – 27, TRC – 42, First Aid – 45

FY10: DART – 19, TRC – 33, First Aid – 52

Recent Injuries

	None
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Recent Events

2/3/12	Non-Reportable	In the midst of performing an instrument calibration, the irradiator stopped allowing the source to be pneumatically raised at about 1620 hrs. The source remains in the shielded position and there were no exposures or injuries.
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Where To Find PHENIX Engineering Info

Happy National Almond day !

(Today is also the anniversary of:

Unsealing of King Tut's Burial Chamber (1922)

Founding of the Studebaker Company (1852)

First 911 Call (1968 Haleyville Alabama)

1st Commercial Helicopter Flight (1947)

Next Monday, Feb. 20, is a Lab Holiday: Washington's Birthday
(aka unofficially as Presidents Day)

Links for the weekly planning meeting slides, archives of past meeting slides, long term planning, pictures, videos and other technical info can be found on the PHENIX Engineering web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

